AN EARLY FLECKER RADIOGRAPH OF HYDROPHIS ELEGANS, AND NEW INFORMATION ON ITS FEEDING HABITS. Memoirs of the Queensland Museum 37(1):68.1994;- Dr Hugo Flecker (1884-1957) was a prominent naturalist - radiologist who spent much of his life in Cairns, NEQ. His work is widely known. He made large, significant, botanical collections; founded the North Queensland Naturalist's Club; and published extensively on plant and animal injuries to humans. A host of plant and animal species bear the name fleckeri in recognition of the value of his contributions to natural history. Flecker was also a pioneer in the field of radiotherapy and published on this, and on early bone development in humans (Clarkson, 1990; Pearn, 1994).

It is not surprising to find that Flecker combined his major interests of natural history and radiology. He took at least 20 radiographs of native animals. These have recently been rediscovered (JRC). Amongst the series of prints (all original films appear to be lost) are radiographs of two species of sea snakes, Hydrophis elegans and Astrotia stokesii. That of the latter species is insignificant zoologically. However, that of the H. elegans specimen provides new data on the feeding habits of this species, and is of aesthetic interest (Fig. 1). Neither of the sea snake radiographs bears a date. However, as others in the series were taken in 1939, it seems reasonable to suggest those of the sea snakes date, at least roughly, from the same era.

The prey species of many sea snakes of Australia's tropical and subtropical waters are well known (e.g. Limpus, 1987). Most are bottom-feeders. Some have ultra-specialized diets (e.g. Emydocephalus annulatus, which feeds on only bleniniid and gobiid fish eggs from burrows in coral reefs). A few feed on a wide range of animals (e.g. Aipysurus laevis eats

fish, prawns, crabs, worms and fish eggs from coral and rock reefs). *H. elegans* is reported to feed solely on very elongate fishes from soft bottom inshore waters (Limpus, 1987).

Flecker's radiograph shows clearly three fish (the posterior-most specimen is a Herring, Family Clupeidae; the others are Cardinal Fish, Family Apogonidae; R. McKay, pers. comm.) and a shrimp (Infraorder Caridea: J.Short, pers. comm.) in the gut of a specimen identified by him as *H. elegans*. This suggests that *H. elegans* may be a less highly specialised feeder than reported to date.

## Literature Cited

Clarkson, J.R. 1990. Hugo Flecker and the north Queensland Naturalists' Club. Pp. 171-178. In Short P.S. (ed.), 'A history of systematic botany in Australasia'. Proceedings of a Symposium held at the University of Melbourne, 25-27 May, 1988. (Australian Systematic Botany Society Inc.: Melbourne).

Limpus, C.J. 1987. Sea snakes. Pp. 195-204. In Covacevich, J., Davie, P. & Pearn, J. (eds), 'Toxic plants and animals, A guide for Australia', (Queensland Museum: Brisbane).

Pearn, J. 1994. Hugo Flecker's contribution to medicine and natural history. The Medical Journal of Australia 161: 63-70

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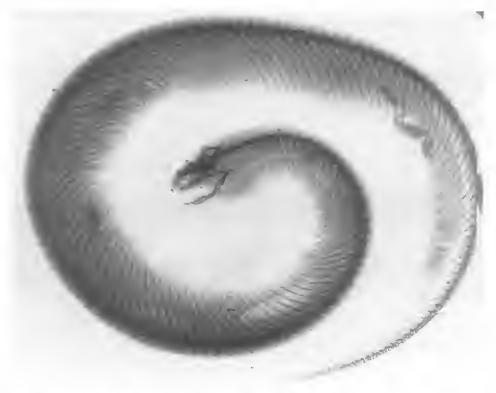


FIG. 1. Radiograph of Hydrophis elegans, following ingestion of two fish and a shrimp, (Dr Hugo Flecker).